

OIB - HU-25C Guardian #524 09/02/16 Science Report

Aircraft:

[HU-25A Guardian #524](#) ([See full schedule](#))

Date:

Friday, September 2, 2016

Mission:

OIB

Mission Location:

Kangerlussuaq, Greenland

Mission Summary:

Mission: Falcon Southwest Coastal B (priority: high)

This mission is one of three (with Falcon Southwest Coastal A and C), which together refly most of the the ?Southwest Coastal A and B? missions flown in Spring 2016. These three flights work together in an interlaced (working upward from the coast) manner. This particular flight concentrates on the second and fifth lowermost of the coast-parallel lines, plus two additional lines covering a southwestern lobe of the ice sheet near Sukkertoppen.

Southern Greenland was again totally clear at our early morning weather check today, and central Greenland was covered in extensive low clouds. Both the US GFS and the Danish HIRLAM forecast models predicted that situation to basically reverse itself during the day, with skies clearing in central Greenland and high clouds moving into the southwest. So we decided to hit the southwest in the morning and leave ourselves several options to the north and east for the afternoon. We found that some altostratus clouds had moved in to the region of the ice sheet between the latitudes of Kangerlussuaq and Nuuk during the early morning, so we lost portions of the northern lines to these clouds. Where practical, we descended variously to 22,000', 18,000', and 14,000' and successfully worked below most of them. Overall, we estimate successful data collection for about 95% of the mission.

All instruments performed well.

Data volumes:

CAMBOT: 16 Gb images

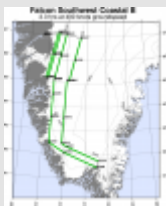
Narrow Swath ATM: 31 Gb

FLIR: 6.6 Gb

total data collection time: 3.4 hrs

Images:

Map of Southwest Coastal B



[Read more](#)

Altostratus and contrail



[Read more](#)

Nunataks and medial moraines



[Read more](#)

Submitted by:

John Sonntag on 09/04/16

Related Flight Report:

HU-25A Guardian #524 09/02/16

Flight Number:

OIB 2016 on HU-25 #21

Payload Configuration:

ATM

Nav Data Collected:

No

Total Flight Time:

3.8 hours

Submitted by:

Richard Yasky on 09/04/16

Flight Segments:

From:	BGSF	To:	BGSF
Start:	09/02/16 10:08 Z	Finish:	09/02/16 13:55 Z
Flight Time:	3.8 hours		
Log Number:	16F003	PI:	Nathan Kurtz
Funding Source:	Thomas Wagner - NASA - SMD - ESD Cryosphere & International Polar Year		
Purpose of Flight:	Science		
Comments:	Research flight over Southwest Coastal B route. high clouds and intermittent low clouds over the northwest portion of the track required descent to FL140 from optimum altitude of 280. No ramp pass attempted due to low clouds at BGSF.		

Flight Hour Summary:

	16F003
Flight Hours Approved in SOFRS	121.25
Total Used	126.9
Total Remaining	-5.65

16F003 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining
06/29/16	OIB 2016 on HU25A ICF	Science	2	2	119.25
07/11/16	OIB 2016 on HU25A #1	Ferry	2.6	4.6	116.65
07/11/16	OIB 2016 on HU25A #2	Ferry	2.5	7.1	114.15
07/11/16 - 07/12/16	OIB 2016 on HU25A #3	Ferry	2.2	9.3	111.95
07/12/16 - 07/13/16	OIB 2016 on HU25A #4	Ferry	2.6	11.9	109.35
07/13/16	OIB 2016 on HU25A #5	Science	3.4	15.3	105.95

07/14/16	OIB 2016 on HU25A #6	Science	3.5	18.8	102.45
07/15/16	OIB 2016 on HU25A #7	Science	3.7	22.5	98.75
07/19/16 - 07/20/16	OIB 2016 on HU25A #8	Science	3.6	26.1	95.15
07/20/16	OIB 2016 on HU25A #9	Science	3.4	29.5	91.75
07/21/16	OIB 2016 on HU25A #10	Science	3.6	33.1	88.15
07/22/16	OIB 2016 on HU25A #11	Ferry	3.9	37	84.25
07/22/16	OIB 2016 on HU25A #12	Ferry	3.2	40.2	81.05
07/22/16	OIB 2016 on HU25A #13	Ferry	2.1	42.3	78.95
08/23/16	OIB 2016 on HU-25 #14	Science	2.3	44.6	76.65
08/25/16	OIB 2016 on HU-25 #15	Ferry	3.2	47.8	73.45
08/25/16	OIB 2016 on HU-25 #16	Ferry	2.2	50	71.25
08/27/16	OIB 2016 on HU-25 #17	Science	3.7	53.7	67.55
08/29/16	OIB 2016 on HU-25 #18	Science	3.8	57.5	63.75
08/29/16	OIB 2016 on HU-25 #19	Science	3.5	61	60.25
09/01/16	OIB 2016 on HU-25 #20	Science	3.4	64.4	56.85
09/02/16	OIB 2016 on HU-25 #21	Science	3.8	68.2	53.05
09/02/16	OIB 2016 on HU-25 #22	Science	3.8	72	49.25
09/05/16	OIB 2016 on HU-25 #23	Science	0.6	72.6	48.65
09/06/16	OIB 2016 on HU-25 #24	Science	3.5	76.1	45.15
09/09/16	OIB 2016 on HU-25 #25	Science	3.5	79.6	41.65
09/09/16	OIB 2016 on HU-25 #26	Science	3.5	83.1	38.15
09/10/16	OIB 2016 on HU-25 #27	Science	3	86.1	35.15
09/11/16	OIB 2016 on HU-25 #28	Science	3.9	90	31.25
09/11/16	OIB 2016 on HU-25 #29	Science	3.7	93.7	27.55
09/12/16	OIB 2016 on HU-25 #30	Science	3.3	97	24.25
09/12/16	OIB 2016 on HU-25 #31	Science	2.7	99.7	21.55
09/13/16	OIB 2016 on HU-25 #32	Science	4	103.7	17.55
09/13/16	OIB 2016 on HU-25 #33	Science	2.9	106.6	14.65
09/15/16	OIB 2016 on HU-25 #34	Science	3.7	110.3	10.95

09/16/16	OIB 2016 on HU-25 #35	Ferry	2.4	112.7	8.55
09/16/16	OIB 2016 on HU-25 #35	Ferry	1.7	114.4	6.85
09/16/16	OIB 2016 on HU-25 #35	Ferry	1.7	116.1	5.15
09/17/16	OIB 2016 on HU-25 #38	Ferry	2.8	118.9	2.35
09/17/16	OIB 2016 on HU-25 #38	Ferry	2.9	121.8	-0.55
09/19/16	OIB 2016 on HU-25 #40	Ferry	2.5	124.3	-3.05
09/19/16	OIB 2016 on HU-25 #40	Ferry	2.6	126.9	-5.65

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

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